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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,308	04/25/2001	Hans Lindenthal	P/3013-6	6700

2352 7590 08/15/2002

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EXAMINER

BINDA, GREGORY JOHN

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 08/15/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/830,308

Applicant(s)
Lindenthal et al

Examiner
Greg Binda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Apr 25, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Apr 25, 2001 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☒ None of:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____
- ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 & 4
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

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Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on applications filed in Germany on Aug 25 and Nov 9, 1999. As noted in the Notification of Acceptance of Application Under 35 U.S.C. 371 (Form PCT/DO/EO/903), Paper No. 2, no copies of these applications have been received by the Office.

Drawings

2. Figures 2a1-a4 are described on page 12 as showing only that which is old in the art. If that is indeed the case, then those figures should be designated by a legend such as --Prior Art-- . See MPEP § 608.02(g).

3. The drawings are objected to because reference characters are used to identify parts in drawings of prior art arrangements and then used again to identify modified forms of the parts in the remaining drawings. See MPEP § 608.02(e).

4. The drawings are objected to as failing to comply with 37 CFR 1.83(a) because the drawings fail to show the details described on page 15, line 11-14.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because:

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a. Reference character "A" has been used to designate both an axis and a spindle on page 18, lines 8 & 14.

b. Reference character "E" has been used to designate both an angle and a plane on page 18, lines 18 & 19.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because:

a. They do not include the following reference signs mentioned in the description:

i. "2" on page 12, line 9

ii. "4" on page 12, line 11

iii. "G" on page 12, line 13; page 16, lines 11 & 25; and page 18, line 22

iv. "12" on page 13, line 23

v. "16" on page 13, line 25

vi. "17" on page 13, line 27

vii. " S_{GM} " on page 14, line 20

viii. "C" on page 15, line 24

ix. "t" on page 16, line 1

x. "B" on page 16, line 2

xi. "d1" on page 16, line 14

xii. "22" on page 16, line 16

xiii. "23" on page 17, line 27

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xiv. "d" on page 18, line 5

b. They include the following reference signs not mentioned in the description:

i. "t₁" in Fig. 1b

ii. "F" in Figs, 2a3 & 2b

iii. "S_{GH}" in Fig. 2a3

7. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

8. The disclosure is objected to as failing to comply with 37 CFR 1.77(c) for failing to include section headings.

9. The disclosure is objected to because:

a. The specification makes reference to specific claims on page 1, line 5 and page 5, line

13.

b. Figs. 2b1 and 2b2 are described on page 16, lines 6 & 7 but no such figures are included in the drawings.

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c. The sentence that begins on page 18, line 18 and continues onto the following page is nonsensical.

10. The specification is objected to as failing to comply with 37 CFR 1.71 and 1.75(d)(1) because the detailed description fails to provide proper antecedent basis for the subject matter of claims 8-11, 13, 23 & 24.

Claim Rejections - 35 U.S.C. § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 2, 3, 8-11, 13, 17, 18, 23 & 24 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

a. Claims 2 & 17 each recite the limitation, "the shape and/or size of the recess are determined as a function of at least one parameter". However, a specific function used to determine recess size and/or shape is not described in the specification. Therefore undue

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experimentation would be required of one skilled in the art to make and/or use the claimed invention due to the numerous parameters involved.

b. Claims 8 & 23 recite “the recesses (20) are arranged symmetrically”; claim 10 recites the recess is “provided with a perforation”; and claim 13 recites that the bore is “designed as a blind hole”. However, in each case no such structure is described or shown. Nor is any reason presented for providing such structure. Therefore undue experimentation would be required of one skilled in the art to make and/or use the claimed invention due to the numerous parameters involved.

c. Claims 9 & 24 recite that the surface of the recess is “surface-treated” and claim 11 recites that the recess “is treated by percussion compression”. However, no such treatment is disclosed. Therefore undue experimentation would be required of one skilled in the art to make and/or use the claimed invention due to the numerous parameters involved.

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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a. Claim 1 recites the limitation "the drive side or take-off side" in line 4 begging the question, "The drive side or take-off side of what?"

b. Claim 1 recites the limitation "the rolling elements" in line 12. There is insufficient antecedent basis for this limitation in the claim.

c. The term "most highly" in claim 1, line 14 and claim 16, line 15 is a relative term which renders the claim indefinite. The term "most highly" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

d. Claim 1, line 15 and claim 16, lines 15 & 16 recite the limitation "the mounted state". There is insufficient antecedent basis for this limitation in the claims.

e. Claims 2, 3, 17 & 18 recites the limitation "the load situation". There is insufficient antecedent basis for this limitation in the claims.

f. Claims 3 & 18 recite the limitation "the force to be transmitted" in line 4 begging the question, "Transmitted by what or whom?"

g. Claim 3, line 5 and claim 18, line 5 recite the limitation "the connecting parts". There is insufficient antecedent basis for this limitation in the claims.

h. Claim 3, line 7 and claim 18, line 7 recite the limitation "the connecting elements". There is insufficient antecedent basis for this limitation in the claim.

i. Claim 3, line 9 and claim 18, line 9 recite the limitation "the bearing play" in line 9. There is insufficient antecedent basis for this limitation in the claims.

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j. Claims 4 & 19 recites the limitation "the surface regions" in line 2. There is insufficient antecedent basis for this limitation in the claims.

k. Claims 4 & 19 recite that a recess is "pointing in a circumferential direction". It is not clear how a recess "points" in a given direction.

l. Claims 5 & 20 recite the nonsensical limitation "toward to pivot axis".

m. Claims 6-8, 21, 23 recites the limitation "the pivot axis". There is insufficient antecedent basis for this limitation in the claims.

n. Claims 7 & 22 each recite the limitations "width" and "extent in the direction of the extension of the bore" as though these two limitations describe two different dimensions of a recess. However, on page 19, lines 24 & 25, recess width is described as a dimension that is one in the same with a dimension that extends in the direction of the extension of the bore.

o. Claims 7 & 22 recite the limitation "the change of profile" in line 2. There is insufficient antecedent basis for this limitation in the claim.

p. Claims 7 & 22, lines 5 & 6 recites "its" but it's unidentified.

q. Claim 8 recites the limitation "the recesses" in line 1. There is insufficient antecedent basis for this limitation in the claim.

r. Claims 8, 15 & 23 recite the limitation "the recesses". There is insufficient antecedent basis for this limitation in the claims.

s. Claims 9 & 24 recite the limitation "the surface of the supporting surface". It is not clear what this means.

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t. Claim 12 recites the limitation "the latter". There is insufficient antecedent basis for this limitation in the claim.

u. Claim 14 recites the limitation "the tool spindle" in line 5. There is insufficient antecedent basis for this limitation in the claim.

v. Claim 14, line 6 recites "a cylindrical bore". It is not clear whether this cylindrical bore is the same as or different from the bore recited in line 4.

w. Claim 16 recites the limitation "the bearing part" in lines 4 & 5. There is insufficient antecedent basis for this limitation in the claim.

x. Claim 18 recites the limitation "the roller-bearing arrangement" in lines 5-8. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 U.S.C. § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 1-7, 9-13, 16-22 & 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Thatcher, US 4,575,361. Fig. 1 shows an articulated yoke 10 having at least one leg member 12 and one bearing part 14. The bearing part 12 surrounds a bore 16 which forms a supporting

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surface 20 with a local recess 22 at the region of most stress. The recess 22, in the direction of the axis of the bore 16, extends over the entire extent of the bore 16 and undergoes a reduction in width. In col. 2, lines 32-35, Thatcher discloses the surface 20 is treated.

17. Claims 1-6, 8, 16-21 & 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Klein, DE 36 05 746. According to applicant's explanation of relevance (see the international search report included with the information disclosure statement filed Apr 25, 2001) Klein discloses all the limitations of the claims.

18. Claims 1-4, 8-13, 16-18, 23 & 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Petrzalka et al, US 4,412,827. Figs. 1, 4 & 5 show an articulated yoke 8 having at least one leg member and one bearing part. The bearing part surrounds a bore 16 which forms a supporting surface with symmetrically arranged local recesses (nominally indicated by numeral 12) at the region of most stress.

19. Claims 1-4, 8-13, 16-18, 23 & 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Heier et al et al, US 5,868,625. Figs. 5 & 6 show an articulated yoke 23 having at least one leg member and one bearing part. The bearing part surrounds a bore 27 which forms a supporting surface with symmetrically arranged local recesses 32 at the region of most stress.

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20. Claims 1-13 & 16-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Petrzelka et al, US 4,512,679. Figs. 5 & 6 show an articulated yoke 8 having at least one leg member and one bearing part. The bearing part surrounds a bore 16 which forms a supporting surface with symmetrically arranged recesses 12 at the region of most stress. The recesses 12, in the direction of the axis of the bore 16, extend over the entire extent of the bore 16 and undergo a reduction in width (see also col. 4, lines 13-25).

Claim Rejections - 35 U.S.C. § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 14 & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thatcher in view of KLFI, SU 1284-804. In col. 2, lines 32-44 Thatcher discloses a method for making a support surface of a bore but does not expressly disclose inclining the tool spindle used. KLFI teaches a method for making a support surface of a bore by inclining the tool spindle used in order to provide improved quality and productivity. It would have been obvious to one of ordinary skill in the art to modify the method of Thatcher by inclining the tool spindle used in order to provide improved quality and productivity as taught by KLFI.

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Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Olschewski et al shows a yoke with stress reducing features. Ward shows a bearing arrangement. Gray et al, Nolden and Brown each show an inclined tool spindle.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached Tuesday through Friday from 9:30 am to 7:00 pm. The examiner can also be reached on alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne, can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 (before final), (703) 872-9327 (after final) and (703) 872-9325 (customer service).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.


Greg Binda
Patent Examiner